

Better Buildings Residential Network Peer Exchange Call Series

Known Unknowns: Key Energy Efficiency Trends in the New Year?

January 13, 2022



Agenda and Ground Rules

- Agenda Review and Ground Rules
- Opening Poll
- Residential Network Overview and Upcoming Call Schedule
- Featured Speakers
 - Tucker Wright, KSV
 - Rachel Gold, Rocky Mountain Institute
- Open Discussion
- Closing Poll and Announcements

Ground Rules:

- 1. Sales of services and commercial messages are not appropriate during Peer Exchange Calls.
- 2. Calls are a safe place for discussion; **please do not attribute information to individuals** on the call.

The views expressed by speakers are their own, and do not reflect those of the Dept. of Energy.





Better Buildings Residential Network

Join the Network

Member Benefits:

- Recognition in media, social media and publications
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- One-on-One brainstorming conversations

Commitment:

provide one number: their organization's number of residential energy upgrades per year, or equivalent.

Members only need to

Upcoming Calls (2nd & 4th Thursdays):

- 1/27: Smart Diagnostics New Advances in the Efficiency Field
- 2/10: Secrets from the Most Successful Residential Efficiency Programs
- 2/24: It's Not About Energy, It's About Comfort Addressing the Reality

Peer Exchange Call summaries are posted on the Better Buildings website a few weeks after the call

For more information or to join, for no cost, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn & click Join







Tucker Wright KSV





KSV is a marketing firm committed to a more sustainable existence with over 40 years of experience in marketing energy efficiency. Our mission is to use our creativity to amplify the efforts of our clean energy energy clients and help people make decisions that positively impact their own lives, the lives of others, and the planet.

There is nothing we love more than to elevate the success of any organization that shares that mindset with us.







Barriers of EE Home Projects

Lack of Awareness

Low Desire

Time & Effort

Cost/Financing



Our Overarching Strategy

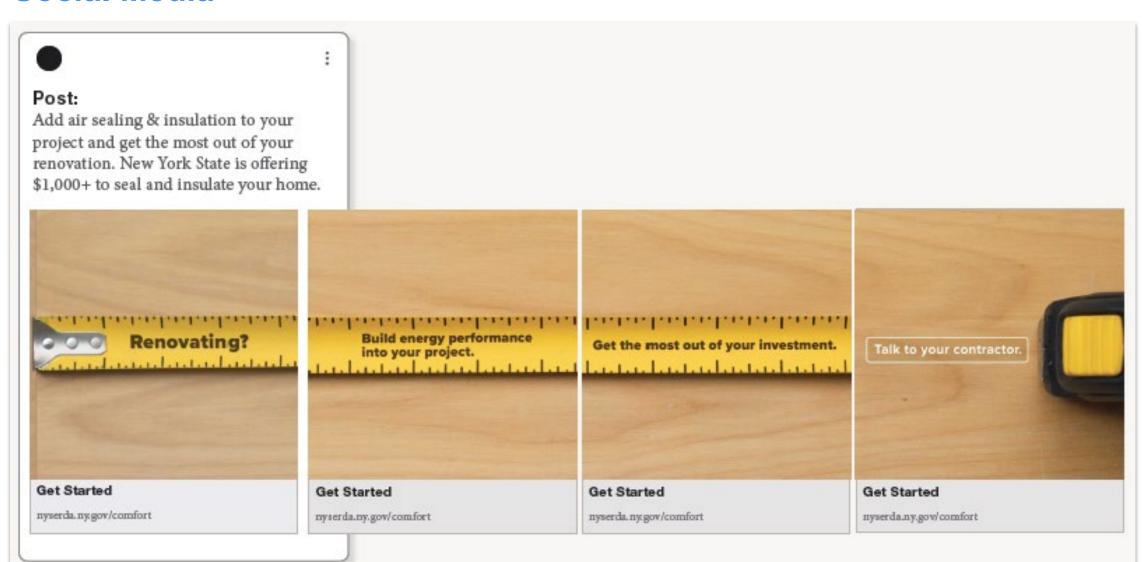
Hyper-target homeowners during use cases (e.g. life moments) when the barriers to large projects may be lowered and they have the highest likelihood of undertaking home energy efficiency improvements.





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Social Media



Native



Renovating? Before You Start, Read This.

BY NYSERDA - Here's one renovation guide you won't want to miss—one that will save you time, energy, and money.

\equiv TIME



Everything You Need to Know About The Falcon and the Winter Soldier

In The Falcon and the Winter Soldier, streaming March 19 on Disney+, Captain America is gone. Or, at least the Steve Rogers who appeared in nearly a dozen Marvel movies, is anyway. The man who...



What to Know About Netflix's Operation Varsity Blues—and the College Admissions Scandal That Inspired It

The \$25 million scheme has been playing out in headlines since March 2019



Elliot Page Is Ready for This Moment

In the first interview Page has given since disclosing that he is transgender, the actor discusses his identity



What to Know About Children's Author Roald Dahl's Controversial Legacy

Concerns about anti-Semitism, racism and misogyny have raised questions about the widely beloved author



Renovating? Before You Start, Read This.

BY NYSERDA - Here's one renovation guide you won't want to miss—one that will save you time, energy, and money.



Michelle Obama's Wonderful Netflix Show Waffles + Mochi Is the Sesame Street of Food TV

Parents desperate for a distraction during these seemingly



Native

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Your Largest Energy Expense Is Heating and Cooling.

Whether you're seeing rising bills, rooms too hot or cold, or both, it might be time to kick your equipment to the curb. Here's what to look out for.

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THE LATEST

US Long-Term Mortgage Rates Edge Higher; 30-Year at 3.09%

U.S. long-term mortgage rates continued to edge higher this week as the benchmark 30-year loan stayed above the 3% mark.

Associated Press March 18, 2021



Your Largest Energy Expense Is Heating and Cooling.

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RECOMMENDED

HEALTH NEWS
CDC Updates School Distancing
Guidelines

POLITICS

Piden to Tan Pi

Biden to Tap Bill Nelson to Lead NASA

THE REPORT
The Democrats' Quandary Over
Cuomo

POLITICS House Passes Immigration Bills

EDUCATION NEWS

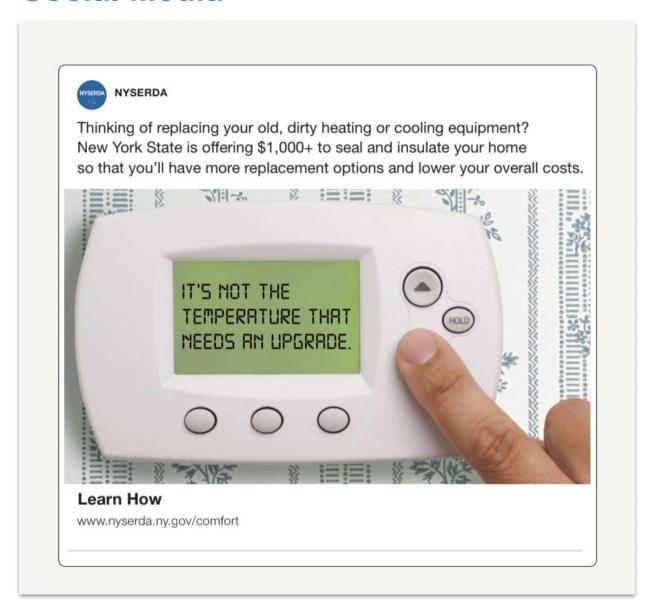
CDC Shows Pitfalls of Flouting
School Guidance

6 Signs Your Heating or Cooling System Needs Replacing



Whether you're seeing rising bills, rooms too hot or cold, or both, it might be time to kick your equipment to the curb.

Social Media



What Happened Next?

- The 2019 campaign was a huge success from an awareness and education standpoint with renovation and proactive equipment replacement life moments delivering a significantly better ROI - likely due to the aggressive real estate market.
- While the campaign did not run in 2020 due to the onset of the COVID-19 pandemic, our client relaunched the initiative in 2021 with an air-sealing and insulation program offer.
- Based on an ROI analysis done by the program team the campaign will relaunch in 2022 with the potential to test a new life moment - first heating season in the new home.

So, what can you do?

Document barriers to entry for your products and services and brainstorm specific moments when those barriers may be lowered or even eliminated.

Work with your internal marketing teams and outside partners to determine what opportunities are available to intersect with customers when they are in those moments.

Test. Learn. Repeat. Don't be afraid to fail!





Rachel Gold
Rocky Mountain Institute





Known Unknowns: Key Energy Efficiency Trends in the New Year

Better Buildings Residential Network Rachel Gold | RMI January 13, 2022



RMI's Mission: Transforming the global energy system to secure a clean, prosperous, zero-carbon future for all

Driving Decarbonization



Carbon-Free Electricity



Carbon-Free Buildings



Carbon-Free Mobility



Carbon-Free Industry

Strengthening Market Catalysts



Data & Transparency



Climate Finance



Technology



Education & Capacity
Building

Working Across Critical Global Geographies











Context: Why does this matter?

Home energy solutions are an increasingly crucial part of solving the decarbonization puzzle and help the US meet our climate goals.



Bringing Clean Energy Home

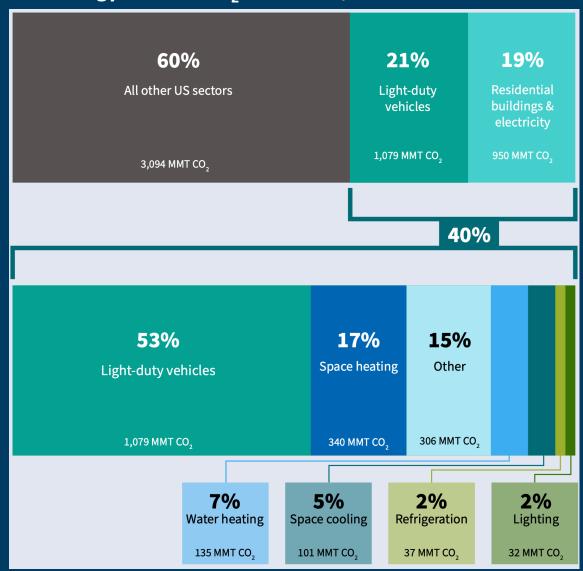
Unlocking Innovation and Policy to Align US Household Energy Use with Ambitious Climate Targets



Report Oct 2021

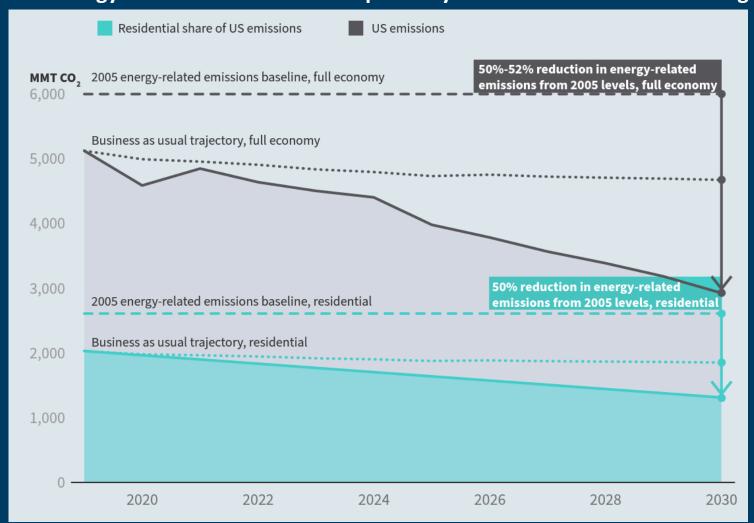
The energy transition can start at home

US energy-related CO₂ emissions, 2019

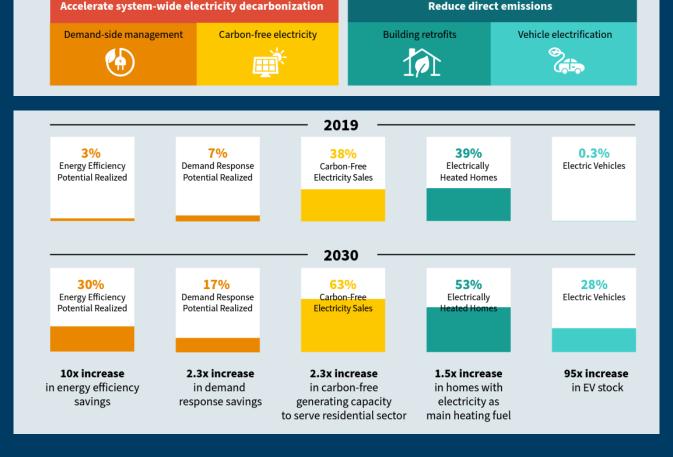


The residential sector is not on track for emissions reductions in line with US climate targets

US energy emissions reductions required by 2030 to reach US climate targets

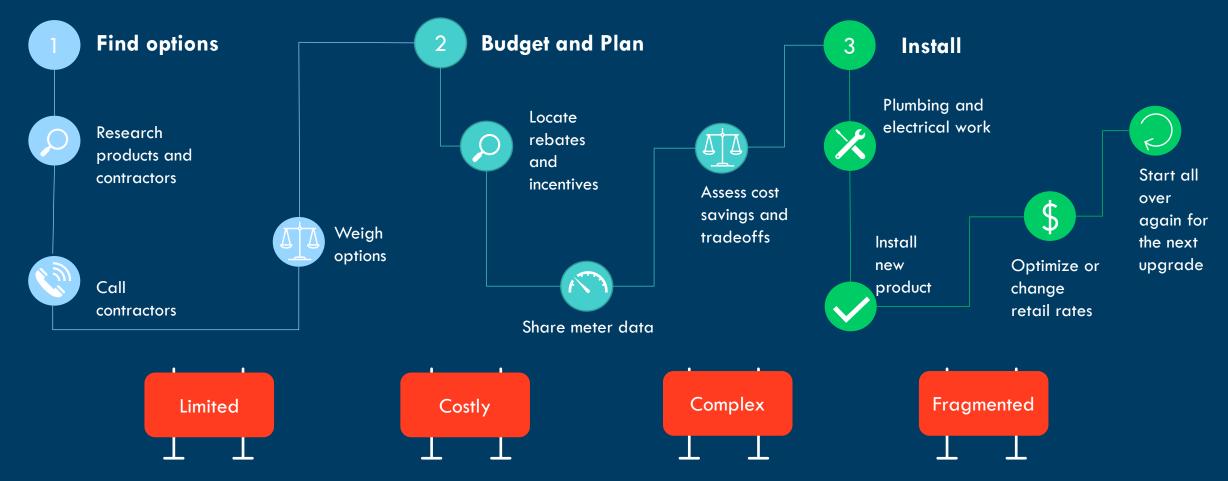


Households have options today to reduce emissions. Scaling adoption can help meet climate policy goals.



Indicative adoption levels of key technologies consistent with achieving 50% emissions reductions targets

Households face many direct barriers to adoption today, often linked to underlying policy and regulatory structures



To get on track, solutions need to be easy

Barriers to customer adoption

Limited

Costly

Complex

Fragmented

Principles for emerging solutions

Targeted

Affordable

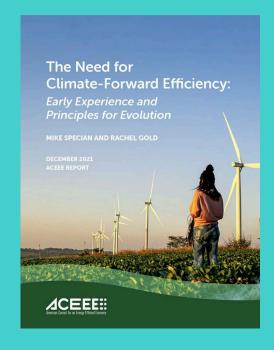
Simple

Integrated

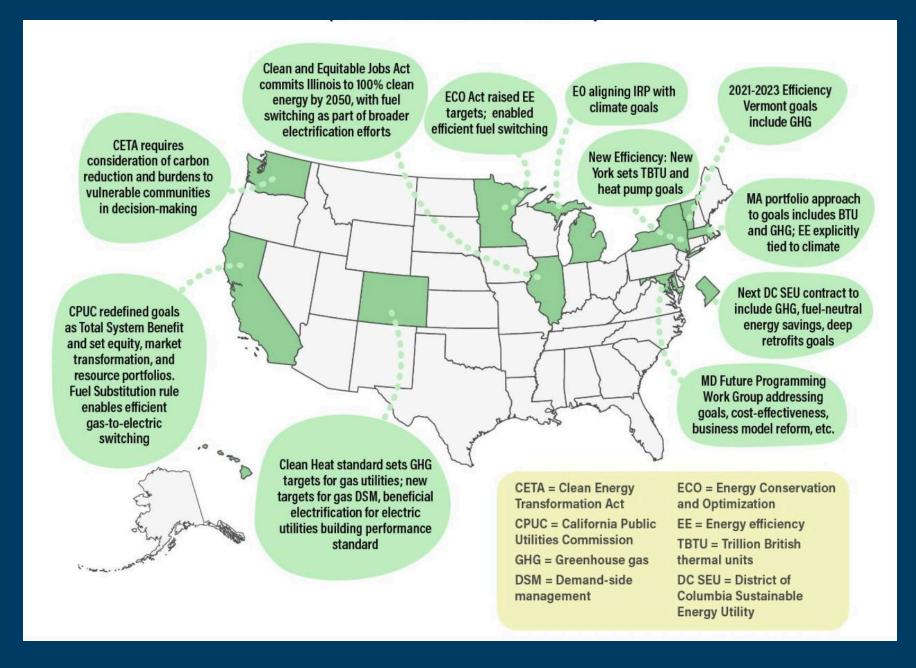
Accelerating efforts to align residential programs with decarbonization objectives in "climate-forward" efficiency

- Redefining energy efficiency
 - Electrification
 - Passive demand reduction (e.g, targeted EE to save at peak)
 - Demand flexibility (e.g, managed EV charging)
 - Non-energy resources (e.g, refrigerant savings, tree planting)

- Updated metrics to measure success
 - Avoided GHG
 - All-fuel savings, usually measured in Btu
 - Total system benefit uses total economic benefits, including GHG reductions, of EE to set goals
 - Proxy metrics e.g, of EVs purchased, large buildings retrofitted, HPs installed

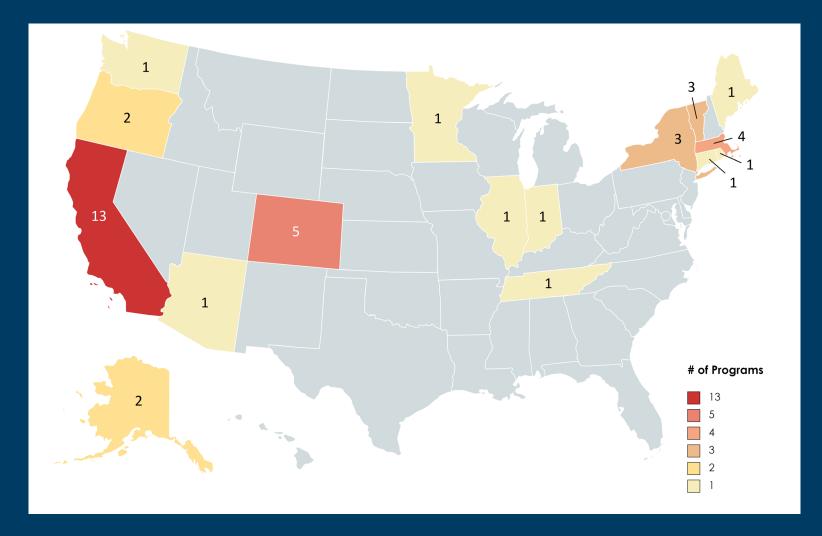


Leading states and utilities are taking action to reform utility polices to unlock climateforward efficiency



These policy changes are already resulting in an increasing focus on programs to electrify space and water heating

- Most programs focused on residential sector, many targeted at delivered fuels (propane, fuel oil)
- Early successes with contractor or distributor incentives, high incentives enabled by putting a value on GHG reductions
- Annual budgets increased to \$166M in 2021, 53% growth relative to 2020



Shift toward equity-driven customer offerings

- Efforts across federal, state, NGOs to define and track the equity metrics that matter to communities, and to better identify those communities
- Focus on energy burden (% of income spent on electricity costs) in policy and programs, especially following 5% rise in electricity burden in 2020
- Trend: legislation explicitly including equity in PUC mandates (e.g., Maine, Massachusetts, Colorado)



Example: shift toward equity-driven efficiency offerings in Washington

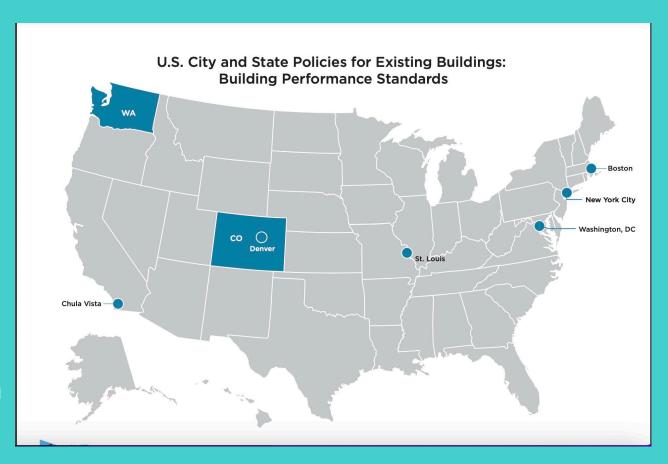


- PacifCorp's Clean Energy Implementation Plan evaluated all resources against these "Customer Benefit Indicators" as relevant:
 - Participation in company energy and efficiency programs and billing assistance programs
 - Households experiencing high energy burden
 - Community-focused efforts and investments
 - Indoor air quality
 - Efficiency of housing stock and small businesses, including low-income housing

- Resulted in the inclusion and expansion of:
 - Enhanced multifamily and manufactured housing incentives (windows, lighting, duct sealing, new construction)
 - Expanded lamp buy downs in "dollar stores"
 - Assistance for non-electric, non-gas heating, replacement with ductless heat pumps
 - Increased funding for low-income weatherization
- Programs to track key groups of participants – e.g, those in highly impacted communities, renters, MF and manufactured home residents

Driving energy efficiency and electrification with a broad range of policy tools

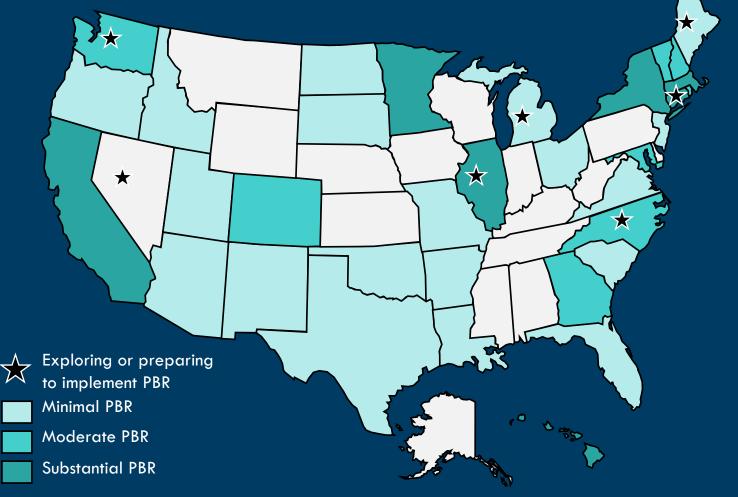
- Existing buildings building performance standards, other state + city commitments and actions
- Codes shifts to incentivize allelectric new construction
- Shifts to utility incentives in performance-based regulation
- State investments, and potential for further federal investments in Build Back Better Act



Reanimated performance-based regulation (PBR) to align utility investment with policy outcomes

- PBR has been around for decades and is common outside the U.S. (e.g., UK, Canada, AUS)
- Seven U.S. states actively exploring or preparing to implement PBR

Here, substantial PBR means that the state uses revenue decoupling, MRPs, and PIMs. Moderate PBR means it uses two of these mechanisms, and Minimal PBR means it uses one of these mechanisms.



Sources: David O'Brien, Matthew McDonnell, and Hope Lorah (2020). Electricity Regulation for a Customer-Centric Future, Guidehouse; Weston Berg, Shruti Vaidyanathan, Ben Jennings,

Emma Cooper, Chris Perry, Marianne DiMascio, and Jack Singletary (2020). The 2020 State Energy Efficiency Scorecard, ACEEE; Rachel Gold, Amanda Myers, Michael O'Boyle, and

Grace Relf (2020). Performance Incentive Mechanisms for Strategic Demand Reduction, ACEEE; RMI research. Updated as of December 2021.



Home energy solutions are an increasingly crucial part of solving the decarbonization puzzle and help the US meet our climate goals.

Three predictions for 2022 – we'll see:

 Accelerating efforts to align residential programs with decarbonization objectives in "climate-forward" efficiency

Shift toward equity-driven customer offerings

 Implementation of a broad range of policy tools to drive energy efficiency and electrification



Thank you!

Download resources at:

https://rmi.org/insight/bringing-clean-energy-home/

Utility Transition Hub at: https://utilitytransitionhub.rmi.org/

Contact:

Rachel Gold, rgold@rmi.org

Explore the Residential Program Solution Center

Resources to help improve your program and reach energy efficiency targets:

- Handbooks explain why and how to implement specific stages of a program.
- Quick Answers provide answers and resources for common questions.
- Proven Practices posts include lessons learned, examples, and helpful tips from successful programs.
- <u>Technology Solutions</u> NEW! present resources on advanced technologies, HVAC & Heat Pump Water Heaters, including installation guidance, marketing strategies, & potential savings.



https://rpsc.energy.gov





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